Yearly average of deaths	390,	of births	423,	excess	33
Deduct the number who die annually through intemperance,	87				
Add the loss in births caused by intemperance,			56		
	303		479,	excess	176

Consequently, the author remarks, were it not for intemperance there would be an excess of births over the deaths, annually, of 176; and agreeably to one of Euler's tables, the population would double itself by natural increase in 45 years, whereas, with the present state of things this would scarce be accomplished in centuries.

The probable duration of the intemperate of different ages—of the different grades, and of different periods of intemperance is the subject of the concluding chapter of the first part of the treatise.

In the final chapter of the second part, the author gives some general deductions drawn from the yearly consumption of intoxicating drinks in Laibach.

We have thus presented to our readers some imperfect idea of the nature of the statistics collected by Dr. Lippich in regard to intemperance, its agency in the production of disease, and in augmenting its fatality, in diminishing the procreative energies of its victims, and in shortening their lives. This is a subject of no trifling interest to the pathologist as well as to the enlightened statesman, and although we cannot accede to the entire correctness of all the author's calculations, or to the validity of every deduction he has drawn from the very limited series of observations he has made, yet as presenting a plan upon which future and more extended observations may be based, the publication of the present treatise may not be without important results. D. F. C.

ART. XVII.—*Manuel d'Hydrosudopathie, ou Traitement des Maladies par l'eau froide, la sueur, l'exercice, et le regime, suivaint la methode employée par V. Priessnitz, a Græfenberg.* Par le Docteur BIGEL, Médecin, &c. &c. &c. &c. Suivi d'un Mémoire Physiologique sur la Chaleur Animale. Par M. PELLETAN, Professeur, &c., a Paris. pp. 396, 12mo. Paris. Baillière: 1840.

IN again noticing Dr. Bigel's work, we had at first no design to say more about the opinions expressed in it than is already contained in the abstract, at pages 218-222, of our number for January last, as there compiled from the Medico-Chirurgical Review; but had intended to confine our comments to one or two of the circumstances of the publication. Upon looking over the volume, we still find that analysis, in our opinion, quite sufficient for justice to the general subject, both as regards the inventor and our readers. Along with the history of the water treatment, however, we find included a memoir by Professor Pelletan, on which we propose to add a few remarks at the end of the present notice.

The first circumstance which has attracted our attention is, that the inventor, who has reaped the honourable reward of his exertions in praise, thanks, and a handsome pecuniary independence, is not a "Doctor Priessnitz" at all, being, in fact, a farmer, the son of a farmer, educated in the habits of life which belong to his situation, and among other things, of limited school acquirements, and no other knowledge of the world than was to be acquired in his own retired neighbourhood. With regard to the degree of ease or hardship of his condition, accounts are given with great freedom, but varying among themselves; some speaking of him as a simple labouring man. All agree in representing him as utterly devoid of the slightest knowledge of medicine.

The Paris compiler, Dr. Bigel, described in the English journal as "one of the Medical Professors in the Imperial College, at Petersburgh," does not in-form us very distinctly where his "professorship of midwifery" lies, or whether, indeed, it be public, or, as is not uncommon in Europe, private and voluntary. He informs us that he is an "assesseur" of the College of the Empire of Russia; by which we understand an assistant, liable to be called upon for professional opinions; the word having, in French, a legal sense, equivalent to what we call an "associate judge." What we are told, however, very explicitly, is, that he is the author of no less than four works on Homœopathia. This is stated in a conspicuous flyleaf, facing the titlepage.

This liberality in bestowing medical titles on the inventor, Priessnitz, the partial ambiguity about his editor, and, in fine, the employment of the latter in disseminating Homœopathia, constitute a real source of error into which we reviewers have no right to lead our readers blindfold. Some persons may consider these as small matters, excusable in haste or oversight; but we cannot regard them thus. Such entering-wedges to indifference in respect to accuracy, may be slight in appearance; but it is a principle of that mechanical power that they serve to introduce larger; nor can we ever consent that the boundary of the empire of truth shall ever be violated. It is at the frontiers that such invasions should be met; and a bad example becomes no better by being a little one. In announcing new facts, real or imaginary, in the science or practice of medicine, no precaution against error is more necessary than extreme care and precision in describing the degree and source of authority on which they are alleged. It never can be right to describe a strong-minded labouring man as a doctor of medicine, or to omit the circumstance that a large part of the history of his cures reaches us through the agency of a believer in the sanative efficacy of the quintillionth parts, and other high arithmetic of the Homœopathians.

We feel much more willingness, indeed, to expect the relief of chronic diseases and excessive medication, from the action of the kidneys, liver, mucous follicles, cutaneous pores, and other emunctories, aided by good food, exercise, relief from business and anxiety, and the pure air and water of the Sudetic mountains, than from the imagined presence of drugs in portions so small as to form no perceptible addition to the thinnest coating of a red globule, and no obstruction to an exosmotic porosity. A rapid improvement from the causes we have enumerated, is a thing frequently witnessed among our own mountains, without artificial perspiration; and we have ourselves seen and recognized the production of furuncles in the progress of such recoveries.

We have also a remark to offer in regard to the pompous invention and assumption of new words. Following the practice so familiar in their learned country, and to which men acting under a Latin diploma can hardly with a good grace object, Drs. Engel and Behrend have employed two words constructed from the Greek. The one calls the cold-water treatment of Priessnitz and his predecessors, *hydrotherapia*, and the other, the *hydriatric* method. On these we bestow no censure. They express the fact; and they are well suited to the studies of Germans, and ought to be so to those of Americans. But M. Bigel has coined an expression more majestic, not only in its intonation, but in its pretensions. *Hydrosudopathy* is not only an inadmissible engrafting of Latin and Greek, but implies the claim of being, what?—a *system* of medicine! The syllables "pathy," in this employment of them, mean not a practice, but a doctrine; while we in vain search for anything worthy of the latter appellation throughout the volume, unless we find it in the suggestion, that all the diseases cured at Græfenberg were produced by morbid poisons, subsequently eliminated by means of the water. We might as well make a new word for the use of any other popularized remedy. Suppose we write Lobeliopathy or Alcoholosalipathy! A laical friend, a better Hellenist, it seems, than the author of Dr. Bigel's word, assured us, the other day, that he really thought the expression was Hydropseudopathy.

The mention of the above attempt at connecting M. Priessnitz's successes with something like a philosophical opinion, naturally leads to the paper of Professor Pelletan. The observation so generally applicable, that most of the phenomena of life bear, and indeed require, a double explanation, on one side, in regard to humoralism, and on the other to the doctrine of excitement, is exemplified in the present case. M. P.'s first memoir on the same subject as the present one, was published in 1826, in the Revue Médicale. Not attracting, however, so much of the public attention as the author thought it worthy of doing, he has made the arrangement with M. Bigel to append it to the present volume. We shall endeavour to sketch its outlines; when it will be found to present the explanation, according to solidism, of the cures of M. Priessnitz.

According to the views of Professor Pelletan, the stimulation which heat imparts to the activity of the functions, is not produced by the quantity of free caloric present, but by the rapidity and force of a current. After reminding us of the wonderful phenomena recently found to accompany and surround the route of an electric or magnetic stream, and the complication of these last with heat, he naturally concludes that we have a right to claim all the probability of analogy in favour of the converse existence of currents of electricity and magnetism along with and around those of caloric. After thus establishing, a priori, the possibility and probability of such processes, he goes on to exhibit the connection which can be proved to exist between currents of heat taking place in animal and vegetable life, and the most active vital labours of organized nature. In warm-blooded animals, these accompany the columns of fluid in the arteries. In exogenous vegetables, in which alone these phenomena can be rendered perceptible, a constant flow of free caloric takes place from the ascending sap in the alburnum to the coating of descending vessels, which lies immediately contiguous in the innermost bark. The first conveys a steady stream of heat, derived from the common reservoir of the earth, intended to be diffused and expended at the surface of the plant; while the latter returns fluids already cooled by exposure to the atmosphere in the leaves. It is in the space intervening between these two masses of vessels, that the most energetic actions of vegetable life, with the exception of those which take place in the organs of fructification, are carried on. In the former are produced the two new strata of the wood and bark; possessing, too, a renovated vitality. In the flowers and fruit, to which M. P. does not extend his inquiry, we believe the existence of currents could be shown; but it is inexpedient, at present, to venture so far into vegetable physiology. As much, too, could be said of the cold-blooded animals. Indeed, it is difficult to imagine the continued generation of heat in a vascular organization, without the necessary accompaniment of currents.

Among the warm-blooded tribes, with whom the most important applications of this principle or question occur, the connection of the vital activity of organs with the presence and rapid circulation of red blood, is one of the most familiar principles of physiology, human or comparative, and of pathology. It is certainly unnecessary to expatiate on this point. The theoretical view of Professor Pelletan is undeniably borne out by the universal coincidence of a current of caloric with any one of arterial blood. In the application of ice and other cold substances to the skin, overlying our organs, in medical treatment, M. Pelletan is of opinion, that when the effect is to create a great depression of temperature in the skin, while the sources of caloric in the organ beneath continue unimpaired, the effect is corroborant and stimulating. When the coldness penetrates profoundly the substance of the organ itself, the effect, as is well known, is depressing. This M. P. explains by alleging, (p. 387,) that, in general, the quantities of caloric transmitted by a body, are in proportion to its temperature. We think that M. Pelletan here concedes too much ground; and might claim still more clearness and simplicity for his own theory. The cold which deeply affects the substance of an organ, diminishes, and frequently altogether suspends the currents of caloric which have their origin in the newly aerated blood, both by diminishing the quantity of that fluid which enters the organs, and also by intercepting the heat before it actually enters the tissue which is cooled, and conveying it away directly from the sides of the vessels.

Another and very beautiful illustration of the views of M. Pelletan, is derived from the varying, and often apparently inexplicable effects produced by cold climates upon the vigour of the constitution. If the current of animal heat be so powerful as not to be exhausted at its source, the effect of a low temperature, acting on the surface of the body, (and the same rule applies to icy potations,) is to increase the vigour of the actions of life. If the original source be exhausted or enfeebled, the effect is to destroy or to enfeeble the constitution. Hence the explanation, why in wintry regions of the earth, the most general effect on the human race is to destroy the feeble and invigorate the strong.

M. Pelletan's views, in this point, are confirmed by the observations of Dr. John Davy, on the effect of a climate nearly equatorial in increasing the heat of central parts of the human body, several degrees above the average standard. This is necessary in those regions, even at the lessened rate of human vigour generally found there, to keep up the currents of caloric from the heart and lungs to the evaporating surface. At the other extremity of the scale, if we apprehend his ideas correctly, we should look to find the Hyperborean race of men, the Laplanders, Esquimaux, and Samoiedes, possessing a lower degree of heat in the centres of circulation than the inhabitants of the temperate zones; an inquiry requiring future labour for its answer.

It is obvious that these considerations will explain the effects of cold as a hygienic agent, in strengthening the human body; as well as furnish a neat explanation of the phenomena of what is called *reaction* against cold. We know that a similar train of reasonings has passed through some minds; but the memoir of Professor Pelletan is the first instance in which we recollect to have seen it published.

B. H. C.

ART. XVIII.—*Die Lehre von der Zurechnungsfahigkeit bei zweifelhaften Gemuthszustanden. Fur Aartze und Juristen praktisch dargestellt.* Von Dr. ADOLPH SCHNITZER. Berlin: 1840.

The Doctrine of Responsibility in cases of doubtful State of Mind.

IT is not extraordinary that in a country of learned men, the subject of Dr. Schnitzer's work should excite discussion. As late as 1838, Professor Mittermaier, an eminent German jurist, published a treatise with a similar title. "*De principio imputationes alienationum mentis recté constituendo.*"

So much has been accumulated, both of facts and reasoning, on this matter, in Europe and our own country, that we purpose, at as early a period as possible, to present a full view of it to the readers of this journal. Dr. Schnitzer has pursued his investigations systematically, and notices, amongst other points, the following:

The imputation of responsibility to those who are pregnant—mania sine delirio, amentia occulta, mania transitoria—on the imputation of illegal acts committed during a lucid interval—monomania—the responsibility for acts committed during sleep, dreaming and somnambulism; the same as to acts committed during a state of intoxication, and the condition of mind induced by habitual drunkenness, and delirium tremens; and the same as to acts committed by the deaf and dumb, and by epileptics.

T. R. B.

ART. XIX.—*A Practical Treatise on the Human Teeth: showing the causes of their Destruction, and the means of their Preservation.* By WM. ROBERTSON. With plates. First American from the second London edition. Philadelphia: LEA & BLANCHARD, 1841. 8vo. pp. 229. Pl. VI.

NEARLY all the writers on the diseases of the Teeth, have maintained the opinion that these organs are possessed of vital properties, and that caries of them is the result of an inflammatory action. Mr. Robertson, on the contrary, comes forward in support of the doctrine, that the teeth are not vital organs, but that the enamel and bone of the teeth are, strictly speaking, inorganic sub-